

GENERAL CONDITIONS

THE WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT EDITION(S) OF THE FOLLOWING SPECIFICATIONS AND THESE PLANS.

MARICOPA ASSOCIATION OF GOVERNMENT (MAG) UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.  
MARICOPA ASSOCIATION OF GOVERNMENT (MAG) UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION.  
A.D.H.S. (ADEQ) ENGINEERING BULLETINS NO. 8 AND 10 (WATER SYSTEMS).  
A.D.H.S. (ADEQ) ENGINEERING BULLETINS NO. 11 AND 12 (SEWAGE WORKS).  
A.W.W.A. STANDARDS.  
M.U.T.C.D. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.  
ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) STANDARD SPECIFICATIONS AND DRAWINGS.  
CITY OF FLAGSTAFF (COF) ENGINEERING DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF THE ABOVE STANDARDS, SPECIFICATIONS AND DETAILS, AS WELL AS ALL OTHER STANDARDS AND SPECIFICATIONS WHICH MAY BE NECESSARY TO COMPLETELY AND ACCURATELY INTERPRET THESE PLANS.

ALL QUANTITIES SHOWN ARE APPROXIMATE AND ARE FURNISHED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THEY DO NOT NECESSARILY CORRESPOND TO BID SCHEDULE ITEMS. PAYMENT WILL BE BASED ON BID SCHEDULE ITEMS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR INDEPENDENTLY ESTIMATING WORK QUANTITIES PRIOR TO BIDDING.

UNDERGROUND UTILITY LOCATIONS, AS SHOWN ON THESE PLANS, WERE DETERMINED FROM FIELD MEASUREMENTS, CONSTRUCTION PLANS, RECORD PLANS, OR UTILITY MAPS FURNISHED BY OTHERS. LOCATIONS OF UNDERGROUND UTILITIES ARE TO BE REGARDED AS APPROXIMATE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH IN THE FIELD THE ACTUAL LOCATIONS OF ALL UNDERGROUND LINES WHICH MAY IN ANY WAY AFFECT THE WORK AND TO FOLLOW ALL ARIZONA BLUESTAKE REGULATIONS.

THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR MAKING COMPLETE AND ACCURATE ON-SITE DETERMINATIONS OF THE LOCATIONS OF ALL UTILITIES, STRUCTURES AND FIELD CONDITIONS, WHICH MAY AFFECT THE PROGRESS OF THE WORK.

WHERE PLANS CALL FOR CONNECTING NEW STRUCTURES TO EXISTING UNDERGROUND PIPES OR STRUCTURES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE, AT THE TIME OF CONSTRUCTION, EXACT SIZES, TYPES AND LOCATIONS OF EXISTING UNDERGROUND IMPROVEMENTS AND TO FURNISH MATERIALS AS NEEDED TO MAKE THE REQUIRED CONNECTIONS.

WHERE THE LOCATION OF EXISTING STRUCTURES ARE INDICATED ON THE PLANS, INDICATED LOCATIONS ARE APPROXIMATE ONLY.

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHAT PERMITS WILL BE REQUIRED FOR THE WORK AND FOR OBTAINING, AT HIS OWN EXPENSE, ALL PERMITS REQUIRED UNLESS STATED OTHERWISE IN THE SPECIAL PROVISIONS.

THE APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. "BLUE STAKE" NUMBER IS 1-300-STAKE-IT. CONTRACTOR SHALL ALLOW TWO WORKING DAYS AFTER "BLUE STAKE" IS NOTIFIED, BEFORE COMMENCING ANY EXCAVATION WORK IN THE PROXIMITY OF BURIED UTILITIES.

RIGHT-OF-WAY AND TRAFFIC CONTROL

THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TRAFFIC CONTROL DEVICES REQUIRED FOR THE CONTROL OF VEHICLE AND PEDESTRIAN TRAFFIC AFFECTED BY THE CONSTRUCTION. ALL TRAFFIC CONTROL PLANS MUST BE APPROVED BY THE OWNER OR HIS REPRESENTATIVE PRIOR TO IMPLEMENTATION.

WATER, SEWER AND RECLAIMED WATER

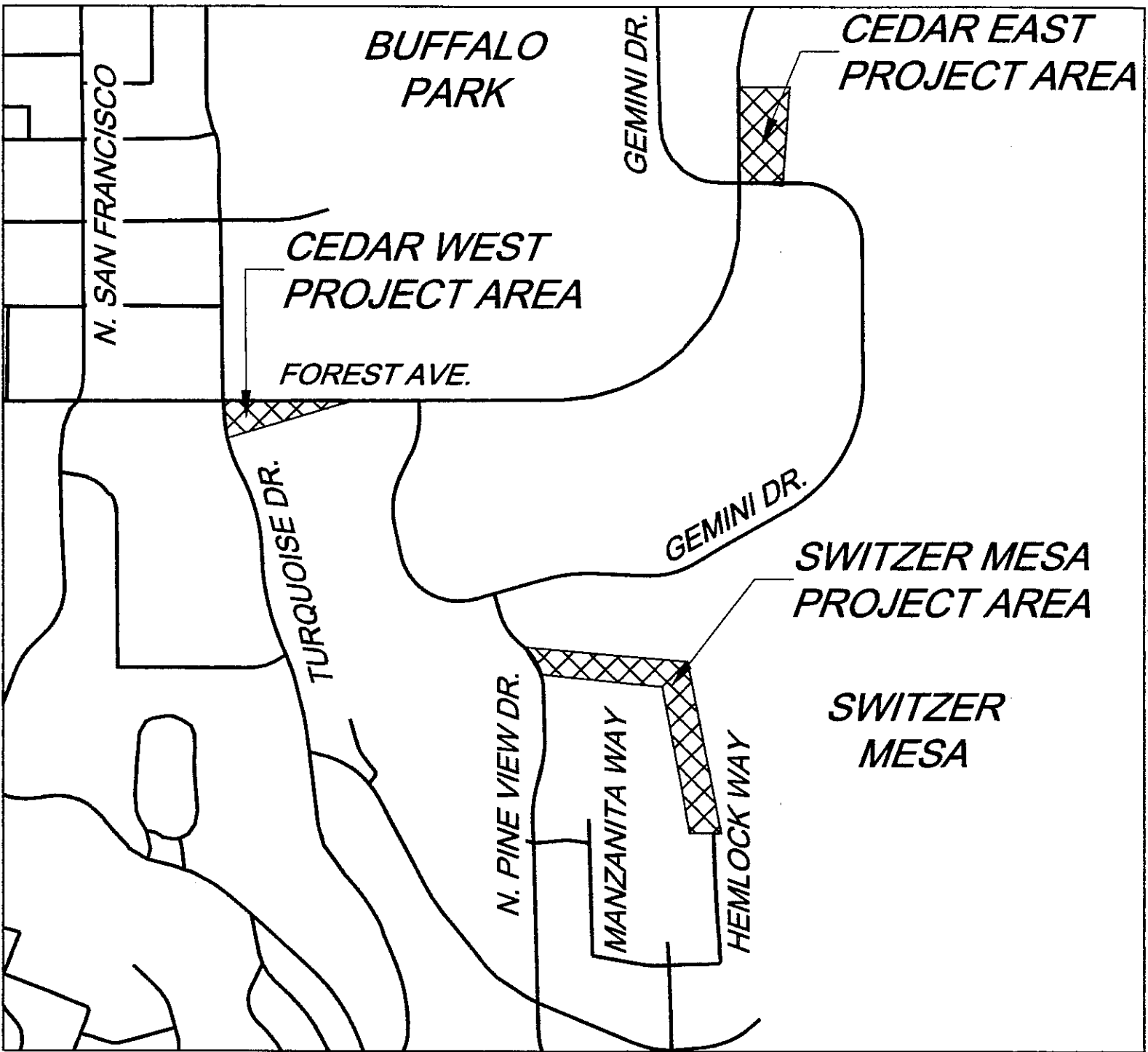
AT LEAST 48 HOURS PRIOR NOTICE IS REQUIRED BEFORE DISRUPTING EXISTING UTILITY SERVICE TO MAKE CONNECTIONS. THE NOTICE MUST INCLUDE THE EXACT TIME OF THE DISRUPTION OF SERVICE AND THE EXPECTED DURATION OF THE LOSS OF SERVICE.

ADEQUATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER STORMWATER MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR PROPERTY OWNER.

CITY OF FLAGSTAFF CONSTRUCTION PLAN NOTES

- APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS FOR A ONE-YEAR PERIOD, SUBSEQUENT TO THE DATE OF APPROVAL. IF CONSTRUCTION WORK IS NOT STARTED WITHIN THE ONE-YEAR PERIOD, OR HAS BEEN DISCONTINUED FOR ANY REASON FOR LONGER THAN ONE YEAR, THE PLANS SHALL BE RESUBMITTED FOR REVIEW AND RE-APPROVAL.
- PLAN REVIEW BY THE CITY DOES NOT EXTEND TO MATERIAL QUANTITIES SHOWN ON THE PLANS.
- A PUBLIC WORKS PERMIT, ISSUED BY THE CITY, IS REQUIRED FOR ALL WORK IN CITY RIGHTS-OF-WAY OR EASEMENTS AND FOR CONSTRUCTION OF ANY IMPROVEMENTS INTENDED TO BECOME PUBLIC PROPERTY.
- THE CITY SHALL BE NOTIFIED 24 HOURS PRIOR TO BEGINNING DIFFERENT PHASES OF CONSTRUCTION SO THAT CITY INSPECTORS MAY BE SCHEDULED.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE CURRENT CITY OF FLAGSTAFF "ENGINEERING DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS," THE CURRENT "MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION," THE CITY OF FLAGSTAFF STORMWATER DESIGN MANUAL, AND WITH GENERALLY ACCEPTED ENGINEERING DESIGN AND CONSTRUCTION PRACTICE. ALL WORK AND MATERIALS WHICH DO NOT CONFORM TO THE STANDARDS AND SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- ANY WORK PERFORMED WITHOUT THE KNOWLEDGE AND APPROVAL OF THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE, IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE MAY SUSPEND THE WORK BY WRITTEN NOTICE WHEN, IN HIS JUDGMENT, PROGRESS IS UNSATISFACTORY, WORK BEING DONE IS UNAUTHORIZED OR DEFECTIVE, WEATHER CONDITIONS ARE UNSUITABLE, OR THERE IS DANGER TO THE PUBLIC HEALTH OR SAFETY.
- THE CITY ENGINEER MAY ORDER ANY OR ALL MATERIALS USED IN THE WORK TO BE TESTED ACCORDING TO THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) AND THE AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS. THE CONTRACTOR SHALL, AT HIS EXPENSE, SUPPLY ALL SAMPLES REQUIRED FOR TESTING.
- ACCESS WHICH MEETS SECTION 13-04-010, FIRE HYDRANTS, WATER MAINS, AND STREET NAME SIGNS SHALL BE IN PLACE AND APPROVED BEFORE AND AT ALL TIMES DURING ON-SITE COMBUSTIBLE CONSTRUCTION AND/OR PRIOR TO ISSUANCE OF BUILDING PERMITS IN NEW SUBDIVISIONS. FIRE DEPARTMENT AND ENGINEERING DIVISION APPROVAL IS REQUIRED FOR OBSTRUCTION OF ACCESS OR WATER SYSTEM SHUTDOWN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STREETS AND OF PARTIALLY COMPLETED PORTIONS OF THE WORK UNTIL FINAL ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL SUBMIT TO THE CITY ENGINEER FOR APPROVAL A CONSTRUCTION SCHEDULE FOR ANY STREETS REQUIRED TO BE CLOSED OR PARTIALLY CLOSED FOR THE CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL REOPEN THE STREETS NO LATER THAN THE OPENING DATE SHOWN ON THE CONSTRUCTION SCHEDULE OR UPON ORDER OF THE CITY ENGINEER. THE REGULATION AND CONTROL OF CONSTRUCTION TRAFFIC SHALL BE AS DIRECTED BY THE CITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE.
- APPROVAL OF A PORTION OF THE WORK IN PROGRESS DOES NOT GUARANTEE ITS FINAL ACCEPTANCE. TESTING AND EVALUATION MAY CONTINUE UNTIL WRITTEN FINAL ACCEPTANCE OF A COMPLETE WORKABLE UNIT. ANY DEFECTS WHICH APPEAR IN THE WORK WITHIN ONE YEAR FROM THE DATE OF ACCEPTANCE AND WHICH ARE DUE TO IMPROPER WORKMANSHIP OR INFERIOR MATERIALS SUPPLIED SHALL BE CORRECTED BY OR AT THE EXPENSE OF THE OWNER/DEVELOPER OR THE CONTRACTOR.
- ACCEPTANCE OF COMPLETED PUBLIC IMPROVEMENTS WILL NOT BE GIVEN UNTIL DEFECTIVE OR UNAUTHORIZED WORK IS REMOVED, AND FINAL CLEAN-UP IS COMPLETE.
- LOCATION OF UNDERGROUND UTILITIES BEFORE WORK IS BEGUN IS TO BE ACCOMPLISHED IN ACCORDANCE WITH ARS 40-360.22.
- IF WORK DONE IS ON PRIVATE PROPERTY IN RELATION TO A PROJECT CONSTRUCTED UNDER THESE STANDARDS, THE CONTRACTOR WILL PROVIDE THE CITY WITH WRITTEN AUTHORIZATION FROM THE PROPERTY OWNER TO DO SO.
- THE ESTABLISHMENT AND USE OF TEMPORARY CONSTRUCTION YARDS SHALL CONFORM TO THE CURRENT CITY LAND DEVELOPMENT CODE STANDARDS FOR "TEMPORARY USES".
- ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE CITY CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED CITY APPROVALS AND PERMITS, AS DEEMED NECESSARY BY THE CITY, TO DISPOSE OF EXCAVATED MATERIAL.
- ALL CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER AND PERFORMED UNDER THE DIRECT SUPERVISION OF A REGISTERED LAND SURVEYOR OR CIVIL ENGINEER.
- ALL DISTURBED AREAS SHALL BE SEEDED PER COF STANDARD SEC. 17-02-01 AND 17-03-010. THE SEED MIX IS TO BE PER PLANT LIST, SHEET C1.
- EXISTING TREES SHALL BE PROTECTED WITH 3' HIGH ORANGE TREE PROTECTION FENCE PER PLANS.

CEDAR & SWITZER MESA  
FUTS IMPROVEMENT PLANS



LOCATION MAP

SCALE: NTS

QUANTITIES

RELOCATE EXISTING BOULDERS	6 EA
REMOVE EXISTING FUTS RAIL FENCE	10 LF
REMOVE & DISPOSE OF EXISTING CURB	30 LF
REMOVE & DISPOSE OF EXISTING CONCRETE	675 SF
ADJUST EXISTING ELECTRIC BOX TO FINISH GRADE	3 EA
REMOVE & DISPOSE OF EXISTING BOULDERS	1 LS
SAW-CUT, REMOVE & DISPOSE OF EXISTING ASPHALT	10 SY
REMOVE EXISTING CROSSWALK STRIPING	1 LS
NEW 10' WIDE CONCRETE FUTS TRAIL	1350 SF
NEW 10' WIDE AGGREGATE FUTS TRAIL	1995 SY
NEW CURB RAMP	1 EA
NEW FUTS RAIL FENCE	10 LF
24" TURN DOWN EDGE ON FUTS TRAIL	40 LF
NEW ASPHALT TO MATCH EXISTING SECTION	10 SY
NEW CONCRETE FUTS ENTRANCE	66 SY
NEW 18" CULVERT	45 LF
NEW 24" CULVERT	120 LF
GRADE CHANNEL	1 LS
CHECK DAM	7 EA
SEEDING & LANDSCAPE RESTORATION	1 LS
3' HIGH ORANGE TREE PROTECTION FENCE	1 LS
SILT FENCE	1375 LF
NEW REMOVABLE BOLLARD	3 EA
NEW CROSSWALK STRIPING	8 LF

CITY OF FLAGSTAFF APPROVALS

UTILITIES DIRECTOR *Randy Bellamy* 1-26-2010 DATE  
CITY ENGINEER *Diana P. Barnett* 1/26/10 DATE  
PUBLIC WORKS DIRECTOR *Eric Solberg* 1/26/2010 DATE

CONCEPT APPROVAL NOTE:  
THE CITY APPROVES THESE PLANS FOR CONCEPT ONLY.  
ALL LIABILITY FOR ERRORS OR OMISSIONS IS THE RESPONSIBILITY OF THE DESIGN ENGINEER.

PROJECT OWNER:

CITY OF FLAGSTAFF  
211 WEST ASPEN AVENUE  
FLAGSTAFF, AZ. 86001  
928-779-7685

PROJECT ENGINEER:

THE WLB GROUP INC.  
523 N. BEAVER STREET  
FLAGSTAFF, ARIZONA 86001  
(928) 779-1500

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UTILITY ACKNOWLEDGMENTS

BRIAN WALLACE ARIZONA PUBLIC SERVICE	9/14/09 DATE
EDIE ANDERSON UNISOURCE ENERGY SERVICES	10/9/09 DATE
SKIP BARDSLEY QWEST COMMUNICATIONS	10/12/09 DATE
SANFORD YAZZIE NPG CABLE	9/18/09 DATE

UTILITY CONFLICT NOTE

THERE ARE NO UTILITY CONFLICTS PER CONSTRUCTION SHOWN ON THESE PLANS.

PLANT LIST

Scientific Name	Common Name	PLS#	A	% of Mix
<b>COVER NURSE CROP</b>				
<i>Triticum aestivum</i> x <i>Elytrigia elongata</i>	Regreen	20#	Acre	
<b>GRASSES</b>				
<i>Bouteloua curtipendula</i>	Sideoats Grama	2		8
<i>Bouteloua gracilis</i>	Blue Grama	4.5		18
<i>Elymus elymoides</i> ( <i>Sitanion hystrix</i> )	Bottlebrush Squirreltail	2.5		10
<i>Festuca arizonica</i>	Arizona Fescue	4		16
<i>Koeleria macrantha</i>	Prairie Junegrass	2		8
<i>Schizachyrium scoparium</i>	Little Bluestem	3.75		15
		18.75#		75%
<b>WILDFLOWERS</b>				
<i>Castilleja linariaefolia</i>	Narrowleaf Paintbrush	0.5		2
<i>Echinacea purpurea</i>	Purple Coneflower	0.75		3
<i>Callirhoe aristata</i>	Blanket Flower	1		4
<i>Linum perenne</i> 'Lewisii'	Blue Flax	0.75		3
<i>Oenothera hookeri</i>	Hooker's evening primrose	0.75		2.5
<i>Penstemon strictus</i>	Mountain Penstemon	1		4
<i>Penstemon virgatus</i>	Wand Beardstongue	0.75		2.5
<i>Ratibida columnifera</i>	Prairie Coneflower	0.5		2
<i>Ratibida columnifera</i> forma <i>pulcherrima</i>	Mexican Hat	0.5		2
		6.5#		25%



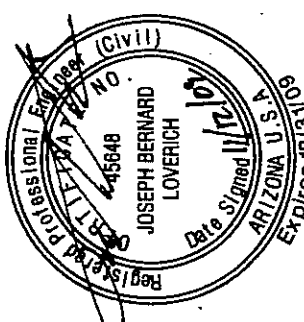
100% PLANS

NO.	DATE	ITEM	REVISIONS

The WLB Group, Inc.

Engineering • Planning • Surveying • Construction Management  
Offices located in: Tucson, Phoenix, Flagstaff, and Las Vegas, NV  
523 N. Beaver Street, Flagstaff, AZ 86001  
PH: (928) 779-1500

CEDAR & SWITZER MESA  
FUTS IMPROVEMENT PLANS  
COVER SHEET



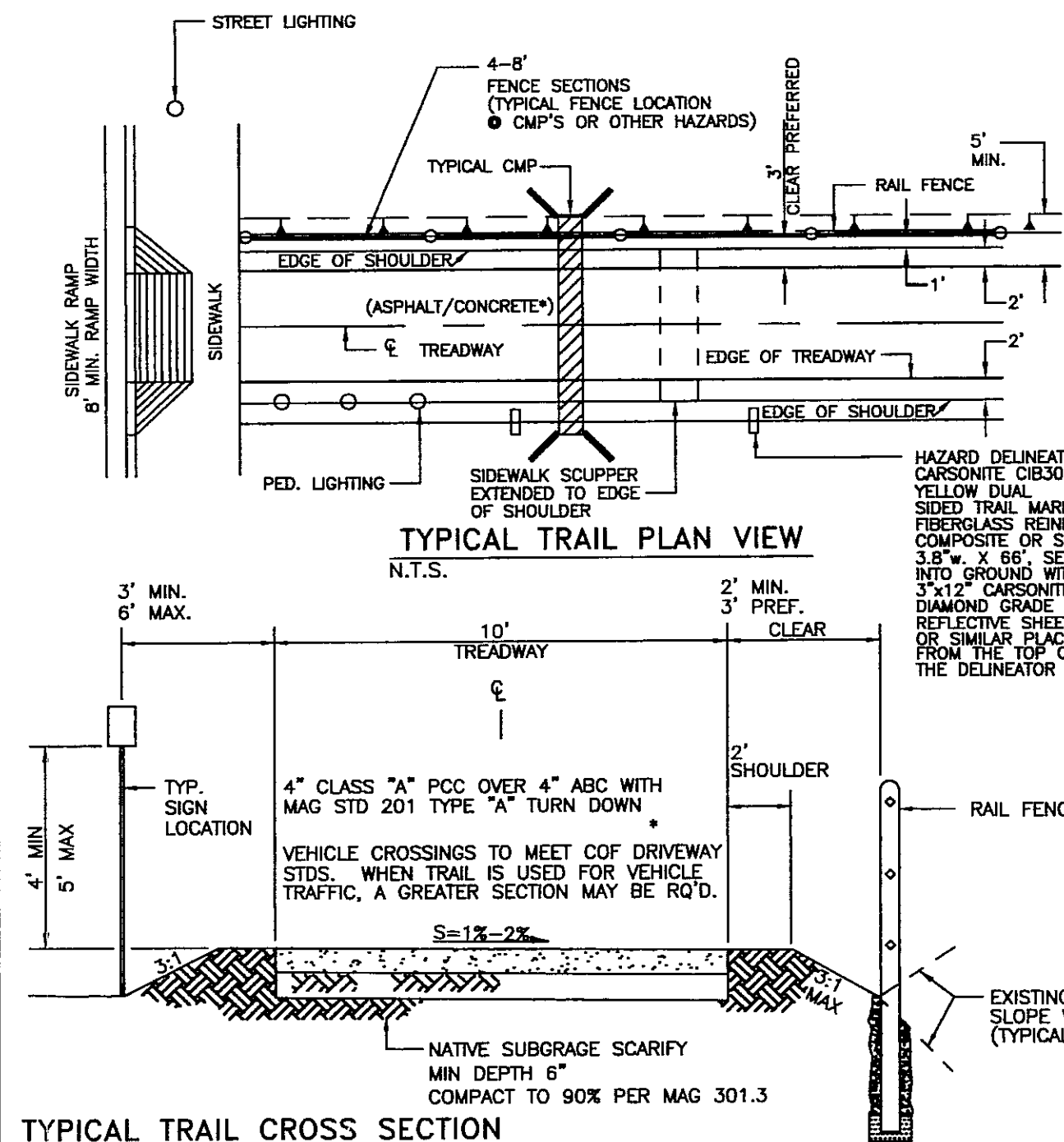
DESIGNED BY: *USJA*  
DRAWN BY: *USJA*  
CHECK BY: *USJA*  
DATE: NOVEMBER 2009  
BY: *USJA* DATE: *USJA*

PROJECT NO.  
309025A001

SHEET C1 OF C5

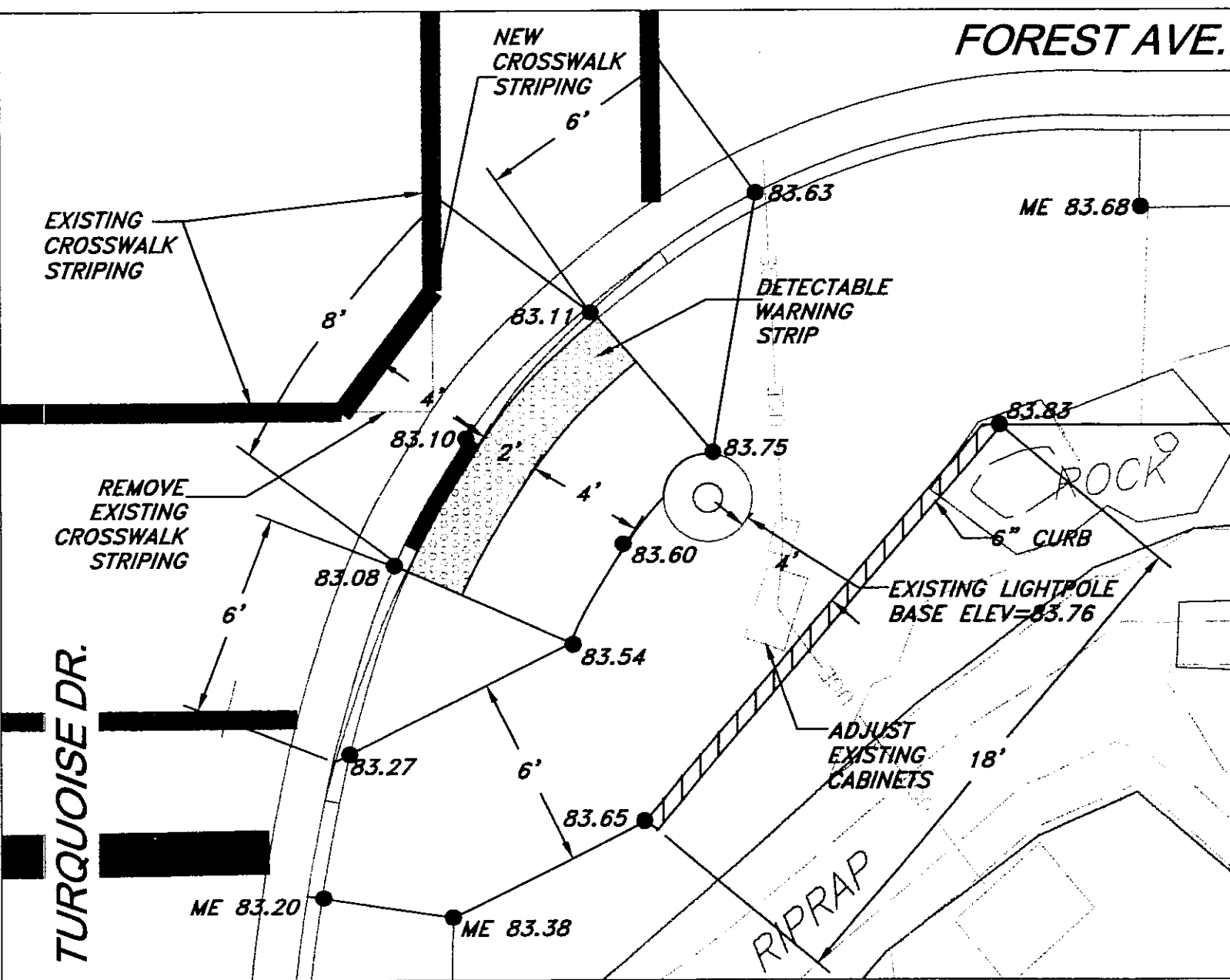


- NOTES:
- 1) 100' MAX DIST. BETWEEN EXPANSION JOINTS (MAX 1/2" WIDE WITH 1/4" MAX RAD.)
  - 2) 10' MAX DIST. BETWEEN CONTRACTION JOINT (SAW CUT OR TROWEL TO 1-1/2" DEPTH WITH 1/8" MAX RAD.)

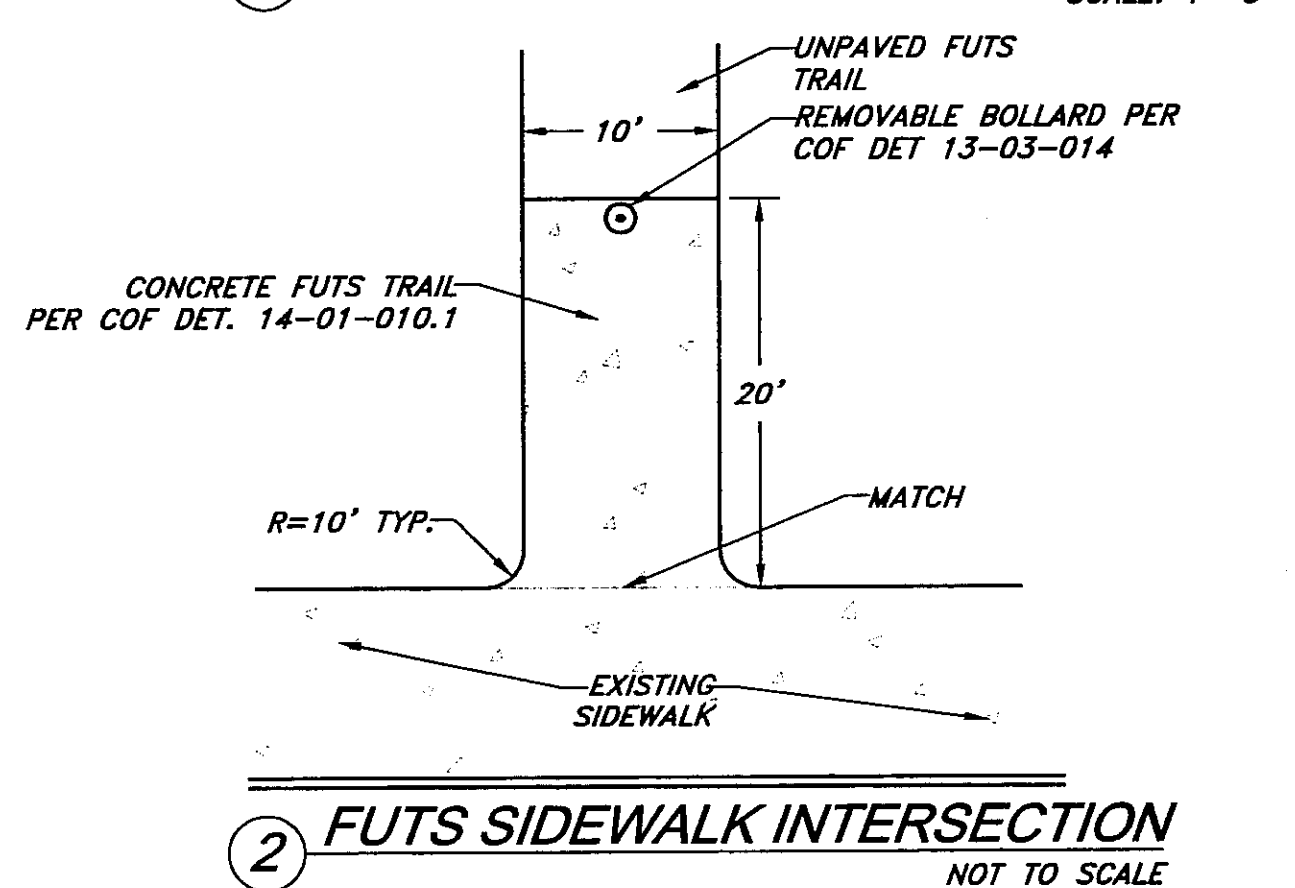


FLAGSTAFF URBAN TRAILS SYSTEM DETAILS  
PAVED SECTION

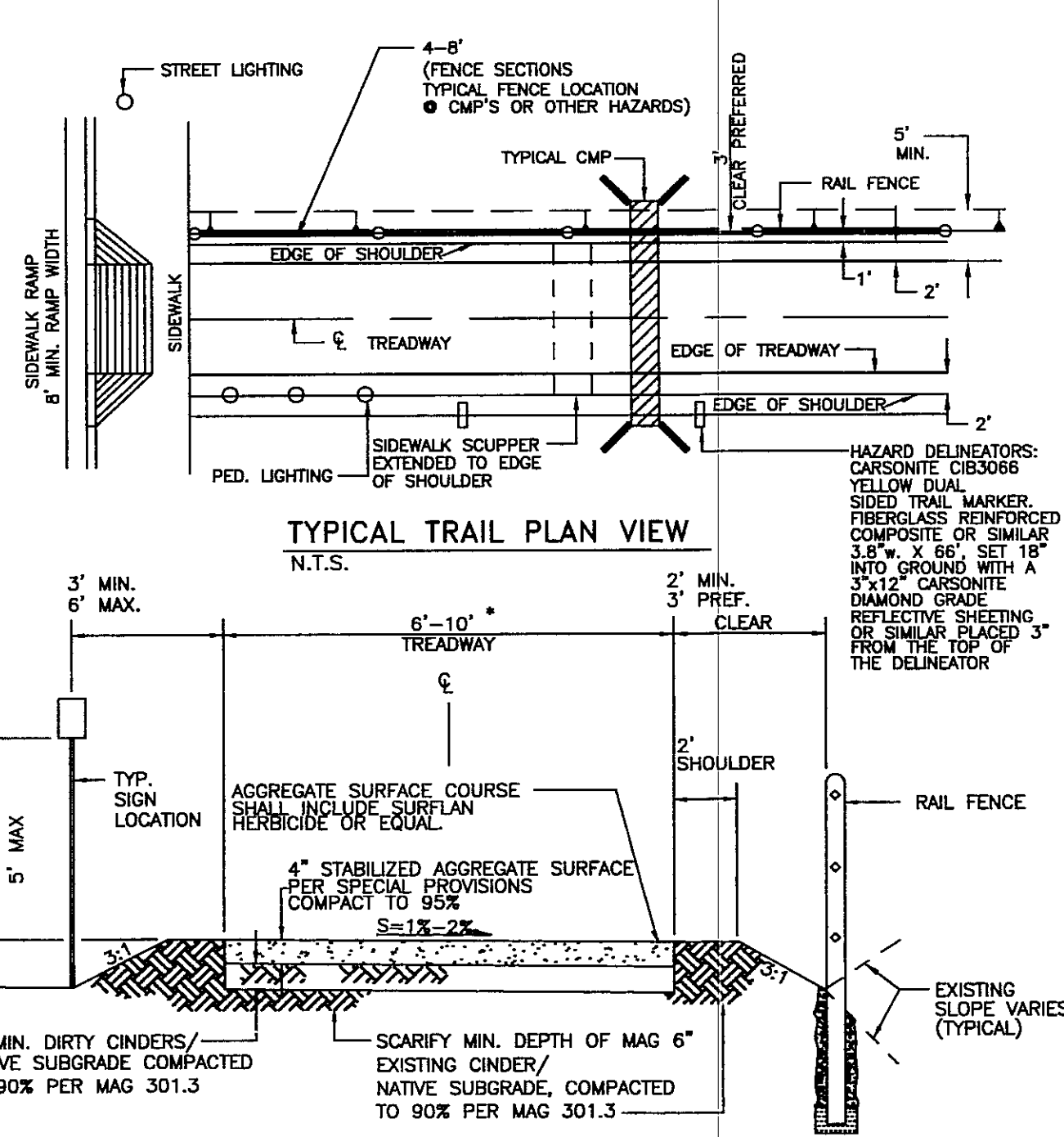
Rev. 12/19/06 City of Flagstaff 14-01-010 1  
ENGINEERING DETAIL



UNPAVED FUTS TRAIL  
REMOVABLE BOLLARD PER COF DET 13-03-014  
CONCRETE FUTS TRAIL PER COF DET. 14-01-010.1  
R=10' TYP.  
EXISTING SIDEWALK

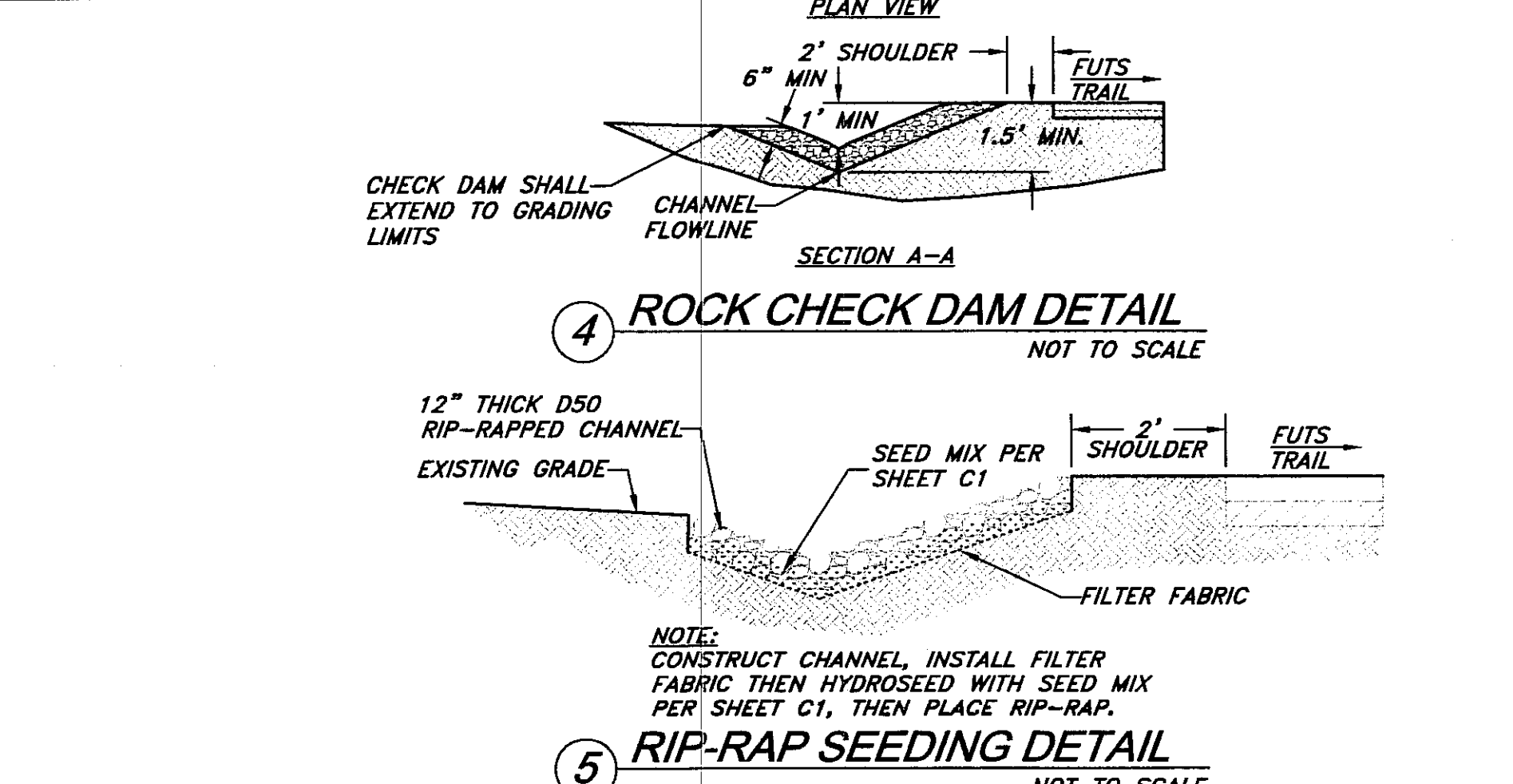
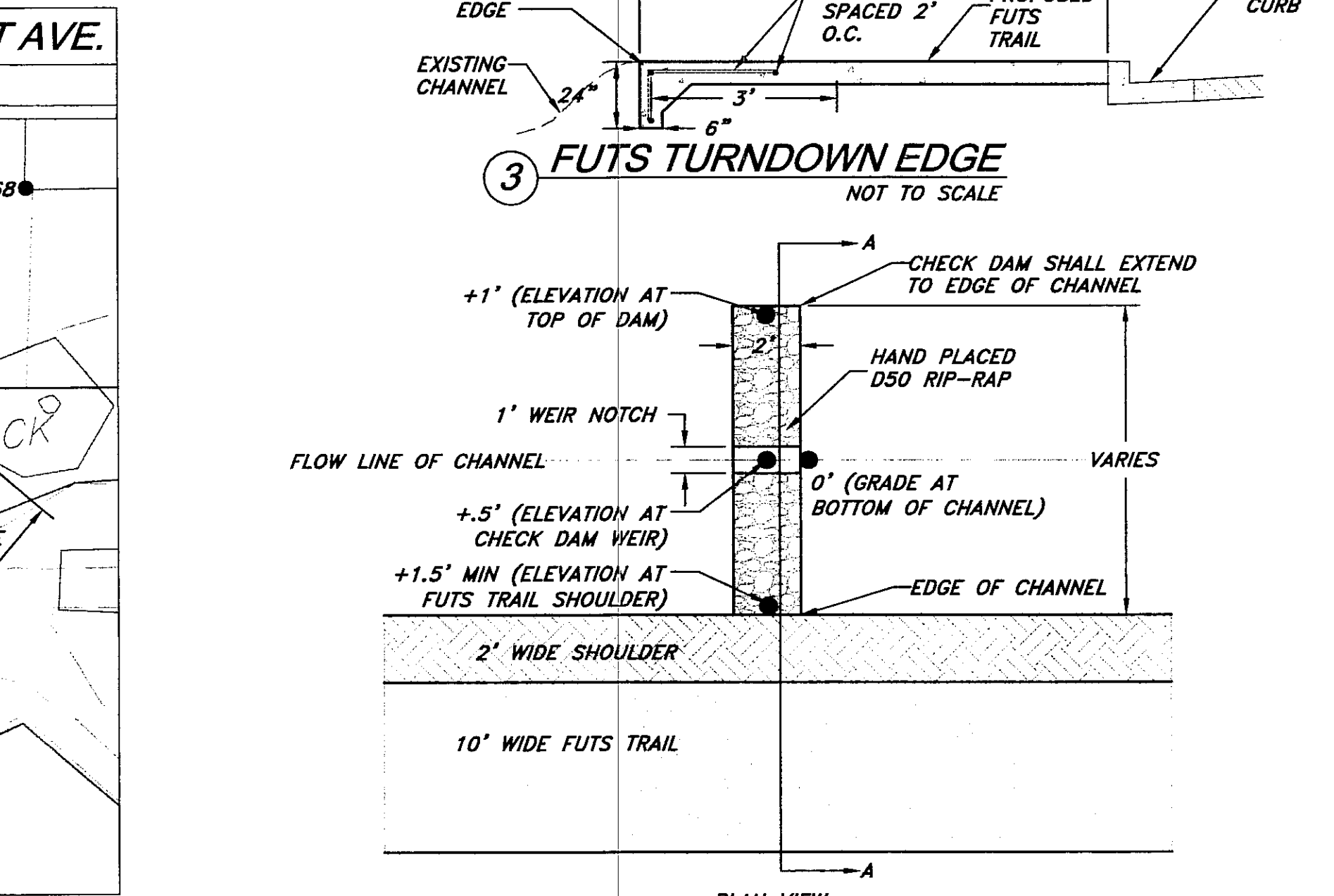


CP-21568



FLAGSTAFF URBAN TRAILS SYSTEM DETAILS  
UNPAVED SECTION

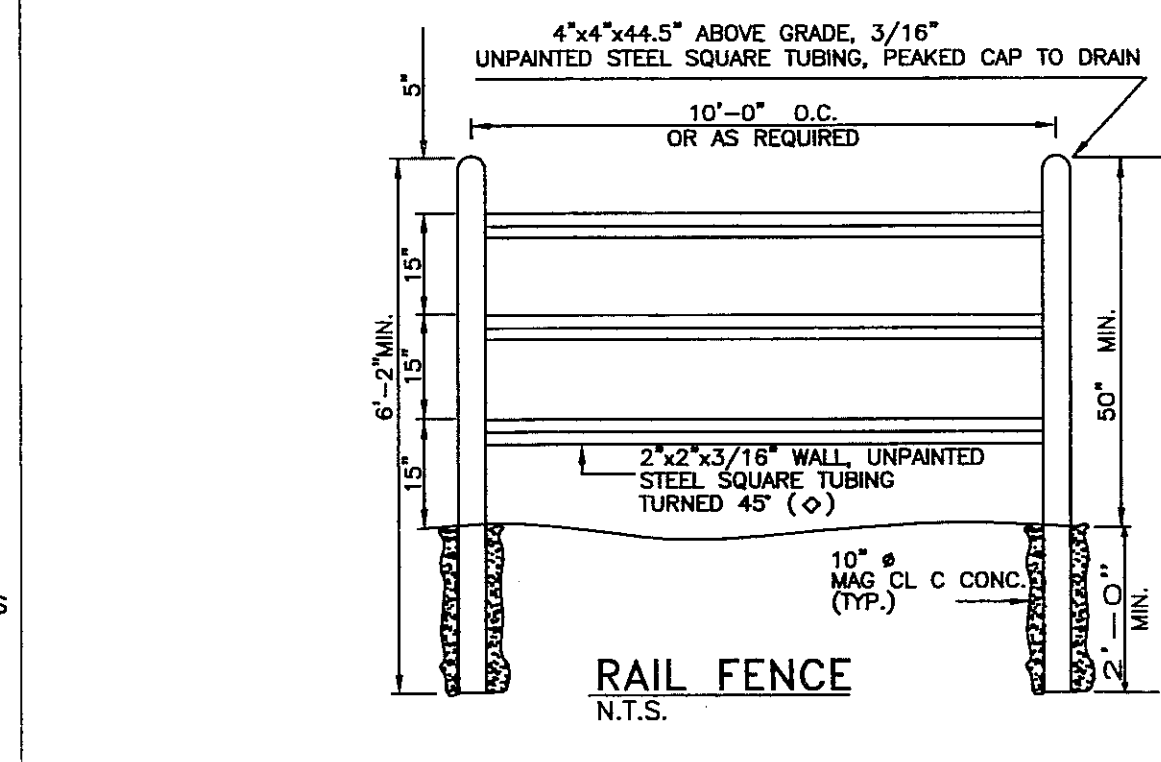
Rev. 12/19/06 City of Flagstaff 14-01-010 2  
ENGINEERING DETAIL



CP-21568

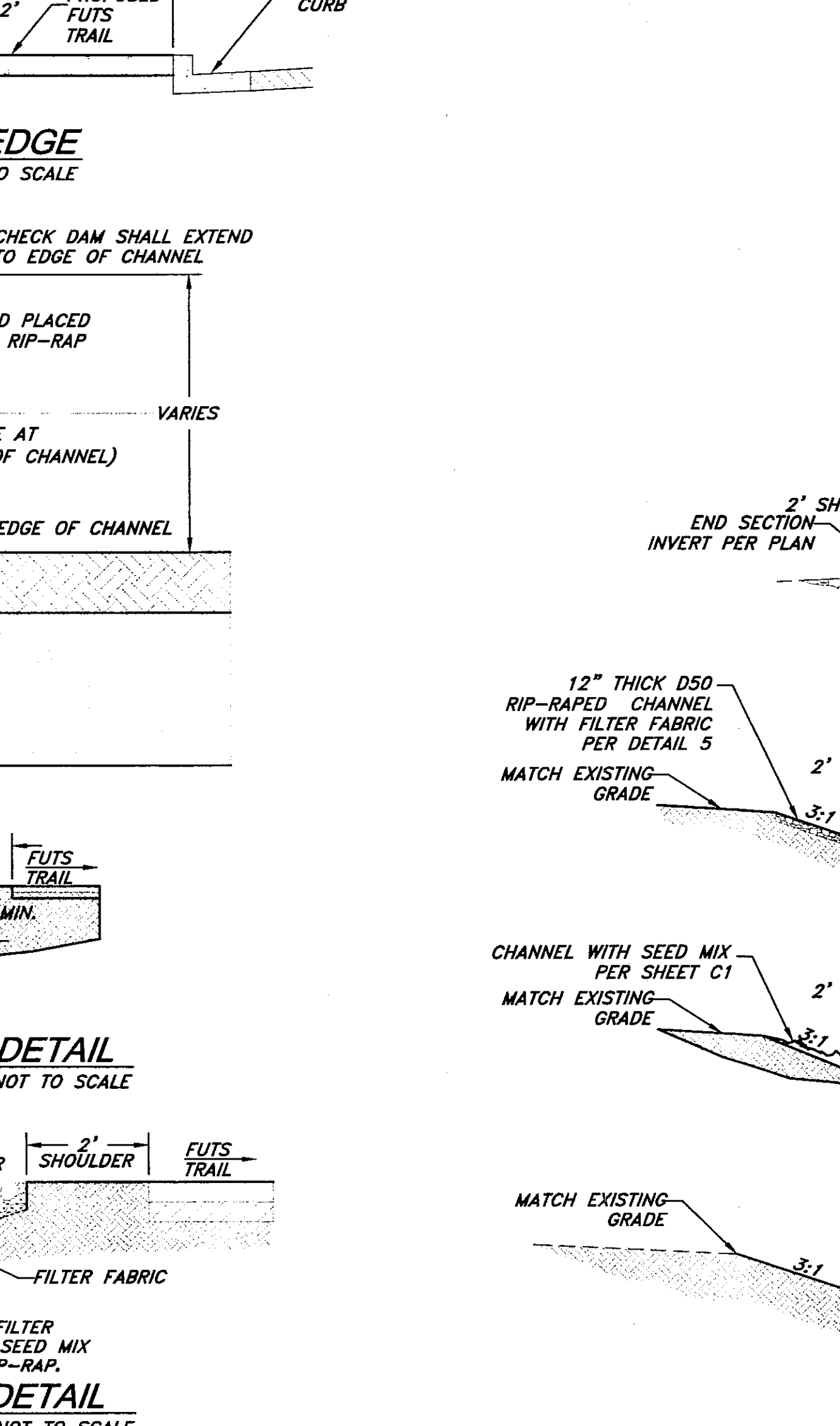
NOTE:

- 1) USE ONE OR TWO SECTIONS OF 5"x5" POSTS AND 3"x3" RAILS FOR ENTRY FEATURES.
- 2) USE 56.5" POSTS AND 4" RAILS IN HIGH HAZARD AREAS.
- 3) SET POSTS 3' DEEP ON SLOPES GREATER THAN 2:1.



FLAGSTAFF URBAN TRAILS SYSTEM DETAILS

Rev. 12/19/06 City of Flagstaff 14-01-010 3  
ENGINEERING DETAIL



CP-21568

UNPAVED SURFACES:

RELATIVE COMPACTION

THE EXISTING NATIVE/CINDER SHALL BE SCARIFIED AND LOOSENEED TO A MINIMUM DEPTH OF SIX (6) INCHES, GRADED AND SHAPED TO MEET THE REQUIREMENTS OF SECTION M.A.G. 301.4 AND THE DETAILS SHOWN ON THE PLANS.

THE SURFACE COURSE MATERIAL MAY BE SPREAD AND COMPACTED WITH THE SCARIFIED NATIVE/CINDER BASE MATERIAL TO PROVIDE A BETTER BOND. THE NATIVE/CINDER BASE SHALL BE COMPACTED TO A RELATIVE DENSITY OF NOT LESS THAN 90% AND AGGREGATE SURFACE COURSE MATERIAL SHALL BE COMPACTED TO A RELATIVE DENSITY OF NOT LESS THAN 92%.

THE FUTS SURFACE COURSE SHALL CONSIST OF FURNISHING AND INSTALLING FOUR (4) INCHES OF AGGREGATE BASE MATERIAL IN ACCORDANCE WITH THE LOCATIONS AND DETAILS SHOWN ON THE PLANS, COMPLETE IN PLACE IN CLUDING ALL SUBGRADE PREPARATION, HERBICIDE APPLICATION AND INCIDENTAL WORK.

HERBICIDE SHALL BE SURFLAN® OR EQUAL FOR PRE-EMERGENT CONTROL AND ROUNDUP® FOR POST EMERGENT CONTROL.

AGGREGATE BASE MATERIAL SHALL BE A COLOR COMPATIBLE WITH NATURAL SURROUNDINGS AND ACCEPTABLE TO THE CITY OR COUNTY. WHITE, LIGHT GREY, OR OTHER VISUALLY INCOMPATIBLE COLORED AGGREGATES WILL NOT BE ACCEPTED.

AGGREGATE BASE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF M.A.G. SECTION 702, EXCEPT THAT THE GRADATION SHALL BE AS FOLLOWS:

SIEVE SIZE (SQUARE OPENINGS)	PERCENT BY WEIGHT PASSING SIEVE
1"	100
3/4"	95-100
1/2"	85-99
3/8"	75-98
No. 4	68-87
No. 8	52-74
No. 30	27-50
No. 100	16-33
No. 200	13-27

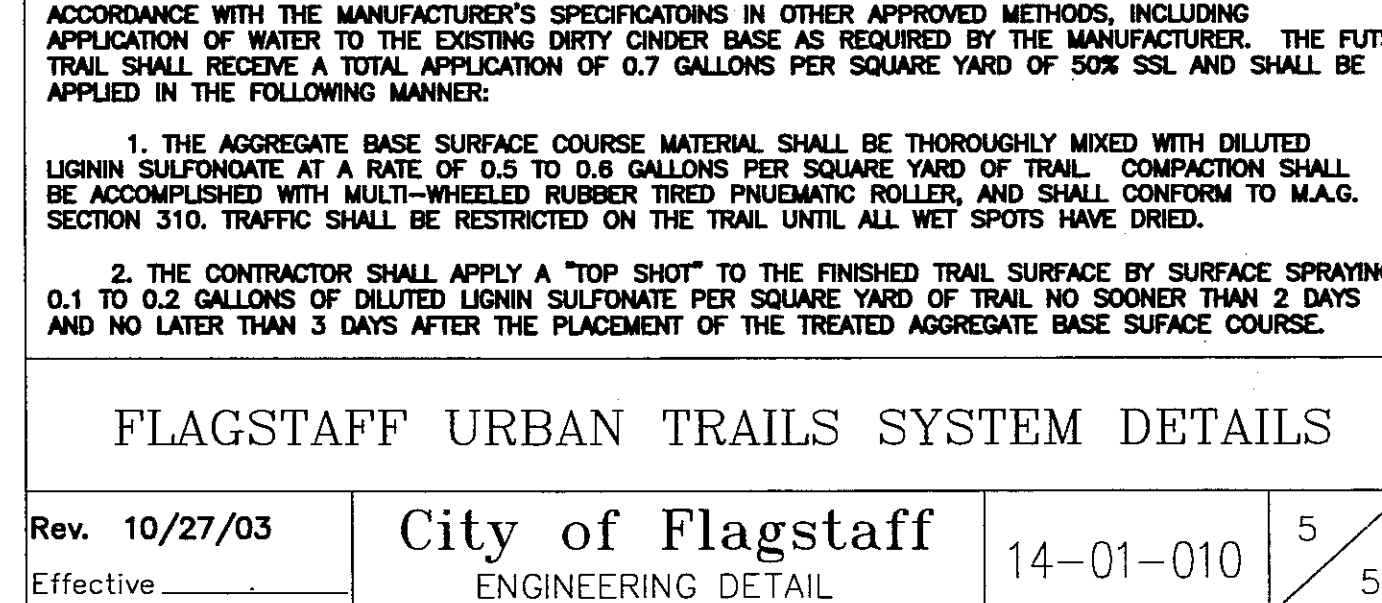
HERBICIDES SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR NON-CROP LAND USE. PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO THE NATIVE/CINDER FUTS TRAIL SURFACE AT A RATE OF 1.5 GALLONS TO 100 GALLONS OF WATER PER ACRE. CARE SHALL BE GIVEN TO CONTAINING THE HERBICIDES TO THE FUTS TRAIL LIMITS ONLY. THE SURFACE COURSE MATERIAL MAY BE SPREAD AND COMPACTED WITH THE SCARIFIED NATIVE/CINDER BASE MATERIAL TO PROVIDE A BETTER BOND. THE AGGREGATE BASE MATERIAL SHALL BE TREATED WITH LIGNIN SULFONATE IN ACCORDANCE WITH M.A.G. SPECIFICATION 792.2.

HERBICIDES SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR NON-CROP LAND USE. POST-EMERGENT HERBICIDES SHALL BE APPLIED TO FUTS TRAIL AFTER THE (EXISTING) DIRTY CINDER BASE HAS BEEN SCARIFIED AND BEFORE SHAPING AND COMPACTING THE DIRTY CINDER BASE. THE POST-EMERGENT HERBICIDE SHALL BE APPLIED AT A RATE OF 1.5 GALLONS OF WATER PER ACRE. CARE SHALL BE GIVEN TO CONTAINING HERBICIDES TO THE FUTS TRAIL LIMITS ONLY.

LIGNIN SULFONATE SHALL BE DELIVERED TO THE CONTRACTOR IN A CONCENTRATED FORM WITH 50% SPENT SULFIDE LIQUOR (SSL). THE CONTRACTOR SHALL FURTHER DILUTE THE LIGNIN SULFONATE WITH AN EQUAL PART OF WATER PRIOR TO SPREADING.

FLAGSTAFF URBAN TRAILS SYSTEM DETAILS

Rev. 10/27/03 City of Flagstaff 14-01-010 4  
ENGINEERING DETAIL



DESIGNED BY: JSL/JL  
DRAWN BY: JSL/JL  
CHECK BY: JSL/JL  
DATE: NOVEMBER 2009  
BY: JSL/JL  
DATE:

PROJECT NO. 309025A001  
SHEET OF  
C2 C5

1-800-782-5348  
BLUE STATE CENTER  
100% PLANS

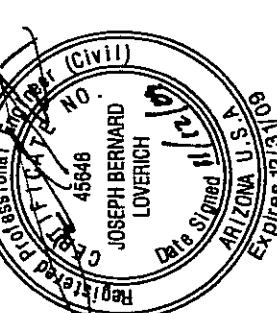
04-09013 FF 218

ITEM	DATE	REVISIONS

Engineering • Planning • Surveying  
Landscape Architecture • Urban Design  
Offices located in: Tucson, Phoenix,  
Flagstaff, Tempe, Scottsdale, Gilbert,  
520 N. Benson Street, Flagstaff, AZ 86001  
PH (928) 779-1500

The **WLB** Group, Inc.

CEDAR & SWITZER MESA  
FUTS IMPROVEMENT PLANS  
NOTES & DETAILS



DESIGNED BY: JSL/JL  
DRAWN BY: JSL/JL  
CHECK BY: JSL/JL  
DATE: NOVEMBER 2009  
BY: JSL/JL  
DATE:

PROJECT NO. 309025A001  
SHEET OF  
C2 C5

04-09013 FF 218

**CEDAR WEST PLAN**

**FOREST DR.**

**TURQUOISE DR.**

APN#: 101-37-001C

EXISTING CATCHBASIN TO REMAIN. NEW CONCRETE SHALL MATCH EXISTING GRADES

EXISTING CURB TO REMAIN

2' SAWCUT

CURB REMOVAL LIMITS

ME:83.68

ME:84.02

ME:83.93

ME:84.92

ME:85.51

ME:85.84

N:1532068.42

E:782811.73

SAW-CUT AND MATCH EXISTING SIDEWALK ELEVATIONS.

RECENTLY CONSTRUCTED FUTS

2-17"x15" CMPA'S

INLETS NOT LOCATED

ME:86.75

N:1532052.89

E:782811.73

VERIFY LOCATION OF PIPES PRIOR TO CONSTRUCTING FENCE. DO NOT CONFLICT WITH PIPES.

EXISTING 18" STORM DRAIN

EXISTING UTILITY RISER TO REMAIN. RISER IS LOCATED OFF THE TRAIL WITHIN THE 2' CLEAR ZONE.

CONCRETE

ME:83.55

ME:83.38

ME:83.20

ME:83.83

ME:84.22

ME:85.12

ME:85.71

ME:84.68

6982

6983

6984

EXISTING CABINETS, ADJUST TO FINISH GRADE.

GRAPHIC SCALE

HORIZONTAL SCALE 1" = 10'

NOTE: ADD 6000' TO ALL ELEVATIONS TO GET ACTUAL ELEVATION.

(NOTE 219) 1 LS  
NEW SEEDING AND LANDSCAPE RESTORATION

**CEDAR EAST PLAN**

APN#: 109-02-001L

GEMINI DR.

**CEDAR AVE.**

GRAPHIC SCALE  
HORIZONTAL SCALE 1" = 20'  
*NOTE:*  
ADD 7000' TO ALL ELEVATIONS TO  
GET ACTUAL ELEVATION.

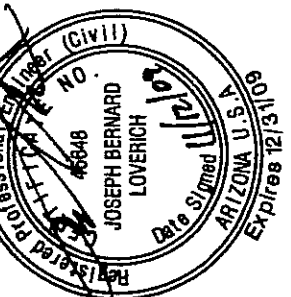
(NOTE 219) 1 LS  
NEW SEEDING AND LANDSCAPE RESTORATION

[illegible]

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**The  
WLB  
Group <sup>INC.</sup>**

**CEDAR & SWITZER MESA  
FUTS IMPROVEMENT PLANS**



DESIGNED BY: JS,JL  
 DRAWN BY: JS  
 CHECK BY: JL  
 DATE: NOVEMBER 2009

BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

PROJECT NO.  
309025A001

<i>SHEET</i>	<i>OF</i>
<b><i>C3</i></b>	<b><i>C5</i></b>



TWO WORKING DAYS BEFORE YOU DIG  
CALL FOR THE BLUE STAKES

**1-800-782-5348**

BLUE STAKE CENTER

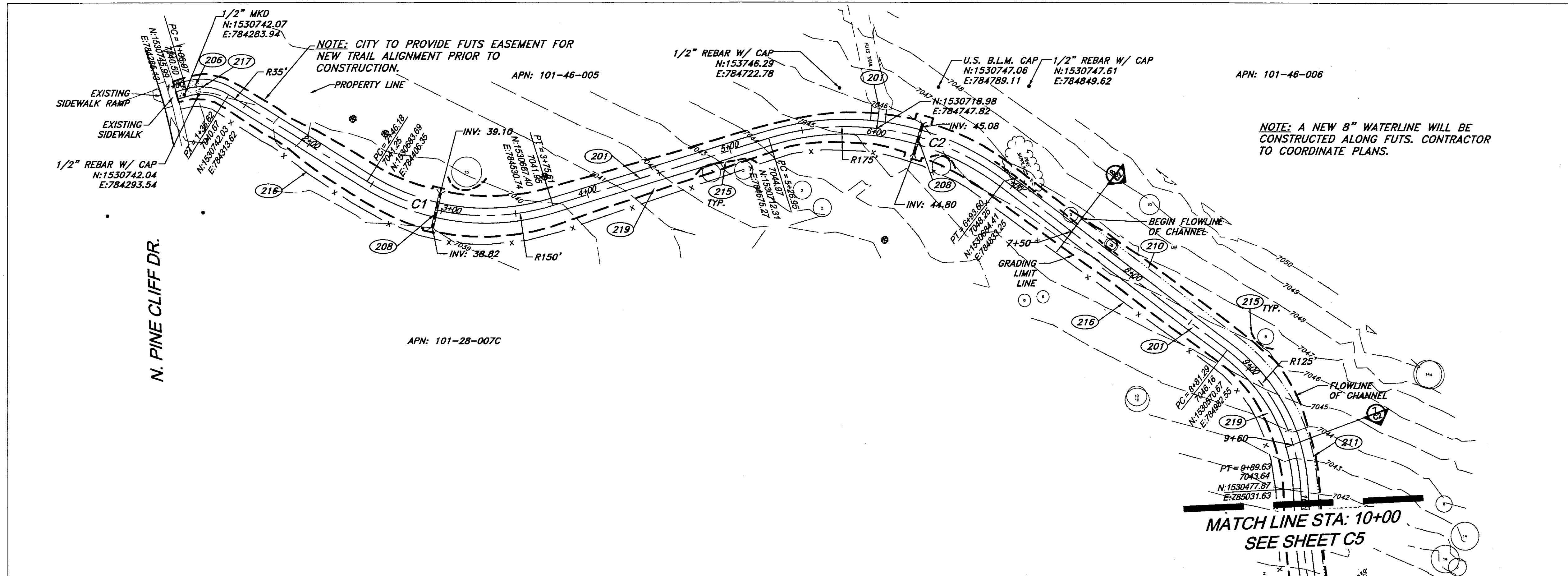
## 100% PLANS

04-09013 FF21B

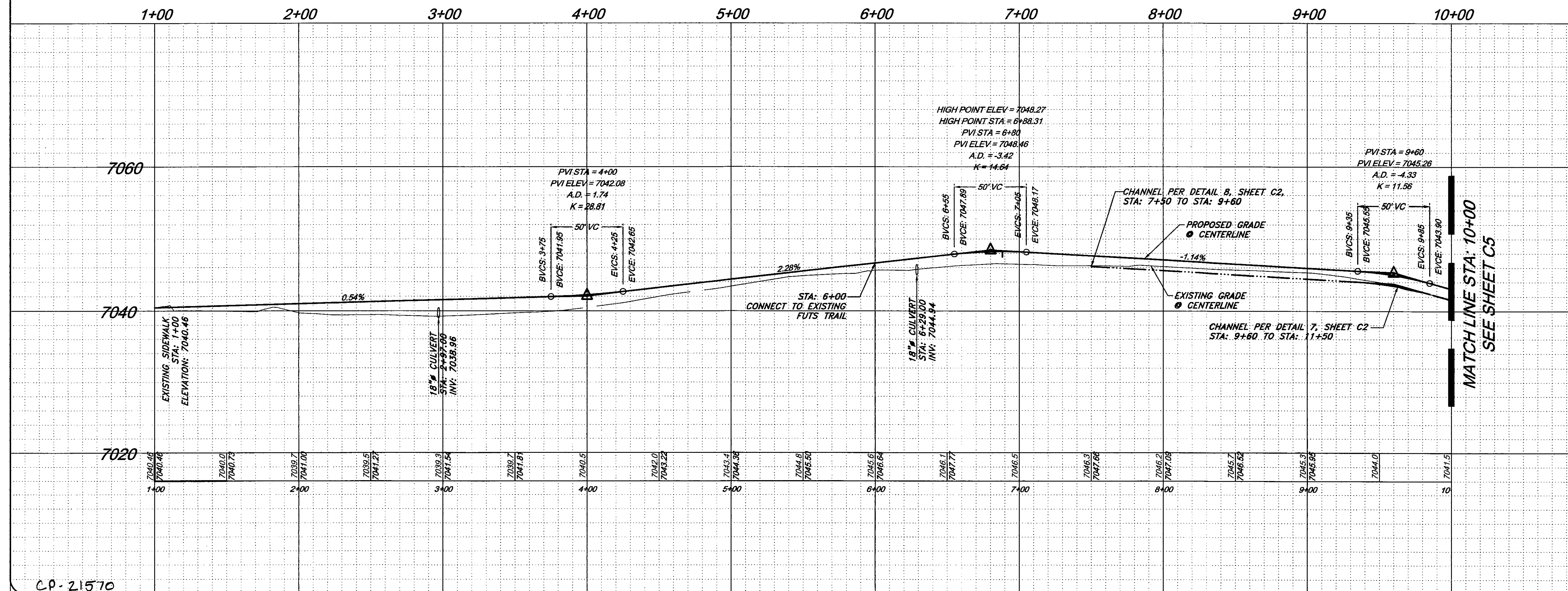
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SWITZER MESA PLAN  
STA: 1+00 TO STA: 10+00



SWITZER MESA PROFILE  
STA: 1+00 TO STA: 10+00  
HORIZONTAL SCALE: 1"=40'  
VERTICAL SCALE: 1"=4'



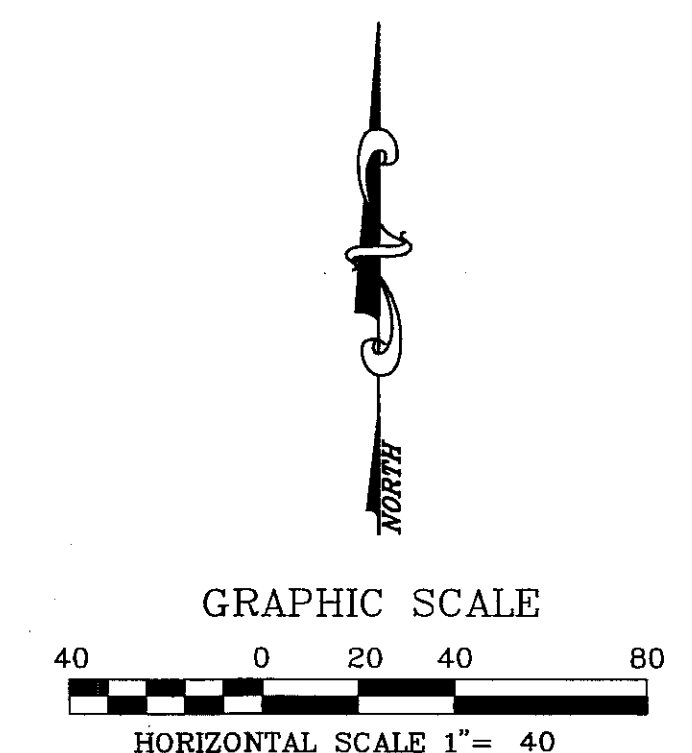
KEYNOTES

- (NOTE 201) 1025 SY  
NEW 10' WIDE AGGREGATE FUTA TRAIL PER COF  
STD. DET. 14-01-010.2
- (NOTE 206) 22 SY  
NEW CONCRETE FUTA ENTRANCE PER DET. 2,  
SHEET C2
- (NOTE 208) 45 LF  
NEW 18" CULVERT PER DET. 5, SHEET C2
- (NOTE 210) 1 LS  
GRADE CHANNEL PER DET. 8, SHEET C2
- (NOTE 211) 1 LS  
GRADE CHANNEL PER DET. 7, SHEET C2
- (NOTE 215) 1 LS  
3' HIGH ORANGE TREE PROTECTION FENCE
- (NOTE 216) 1375 LF  
SILT FENCE OR STRAW WATTLE
- (NOTE 217) 1 EA  
NEW REMOVABLE BOLLARD PER COF DET.  
13-03-014
- (NOTE 219) 1 LS  
NEW SEEDING AND LANDSCAPE RESTORATION

CULVERT TABLE

CULVERT	CENTERLINE STATION	INLET(N/E)	OUTLET(N/E)
C1	2+96.79	1530675.79 784455.41	1530652.59 784450.10
C2	6+29.00	1530722.33 784778.49	1530701.40 784772.43

- NOTE:  
1. 3' HIGH ORANGE CONSTRUCTION FENCE SHALL BE  
INSTALL AROUND ALL TREES WITHIN 30' OF  
PROPOSED FUTA ALIGNMENT AND MAINTAINED  
THROUGHOUT CONSTRUCTION.



1-800-782-5348  
BLUE SCALE CENTER  
100% PLANS

ITEM	DATE	REVISIONS

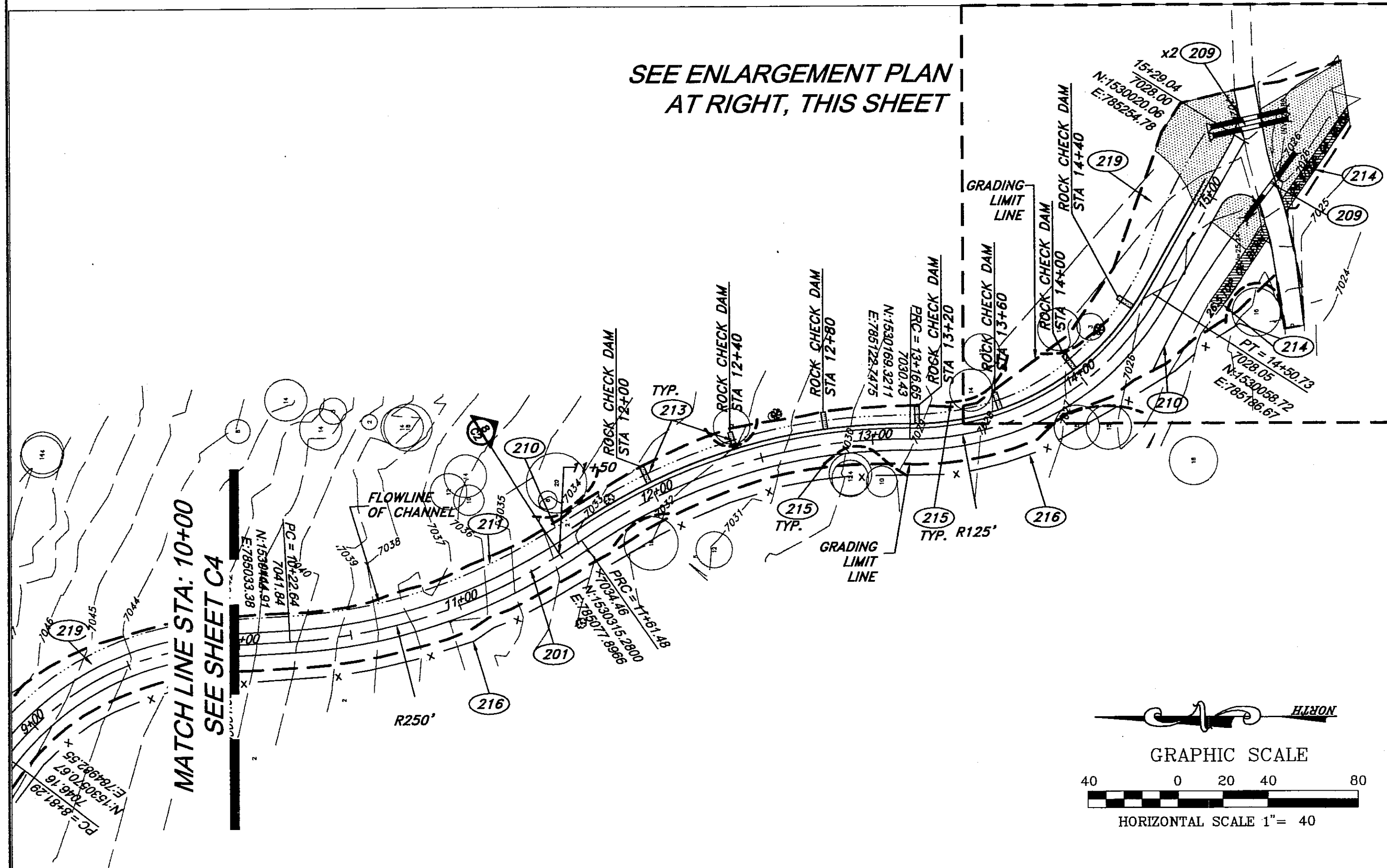
The **WLB** Group Inc.  
Engineering & Planning  
Surveying  
Office located in: Tucson, Phoenix,  
Flagstaff, and Las Vegas, NV.  
523 N. Beaver Street, Flagstaff, AZ 86001  
PH: (928) 779-1500

CEDAR & SWITZER MESA  
FUTA IMPROVEMENT PLANS  
SWITZER MESA PLAN & PROFILE  
STA: 1+00 TO 10+00

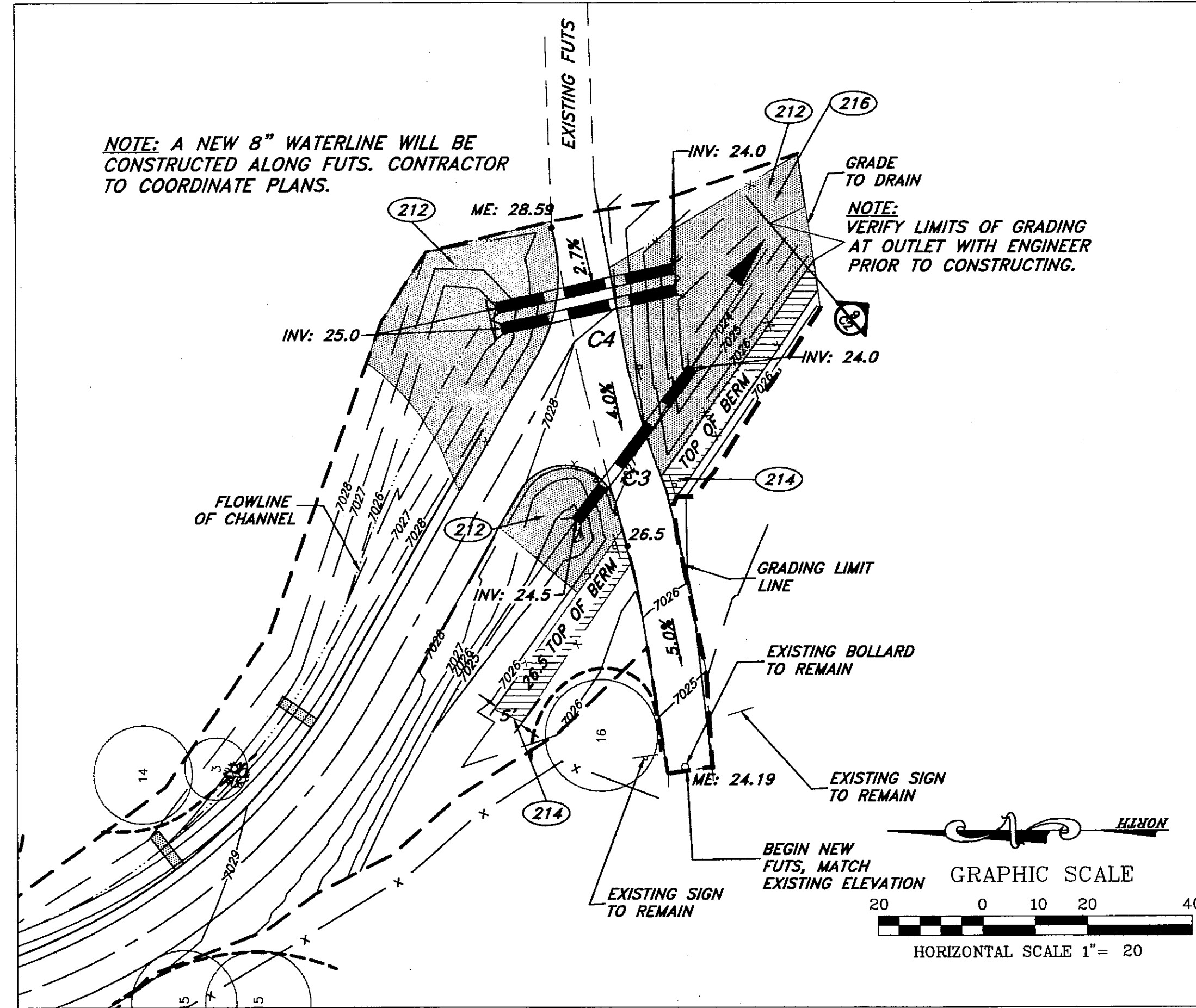
DESIGNED BY: J.S./J.L.  
DRAWN BY: J.S./J.L.  
CHECK BY: J.L.  
DATE: NOVEMBER 2009  
BY: J.L.  
DATE:  

PROJECT NO.  
3090254001  
SHEET OF  
C4 C5

SWITZER MESA PLAN  
STA: 10+00 TO STA: 15+29.04



GRADING ENLARGEMENT PLAN  
AT TRAIL TERMINATION



KEYNOTES

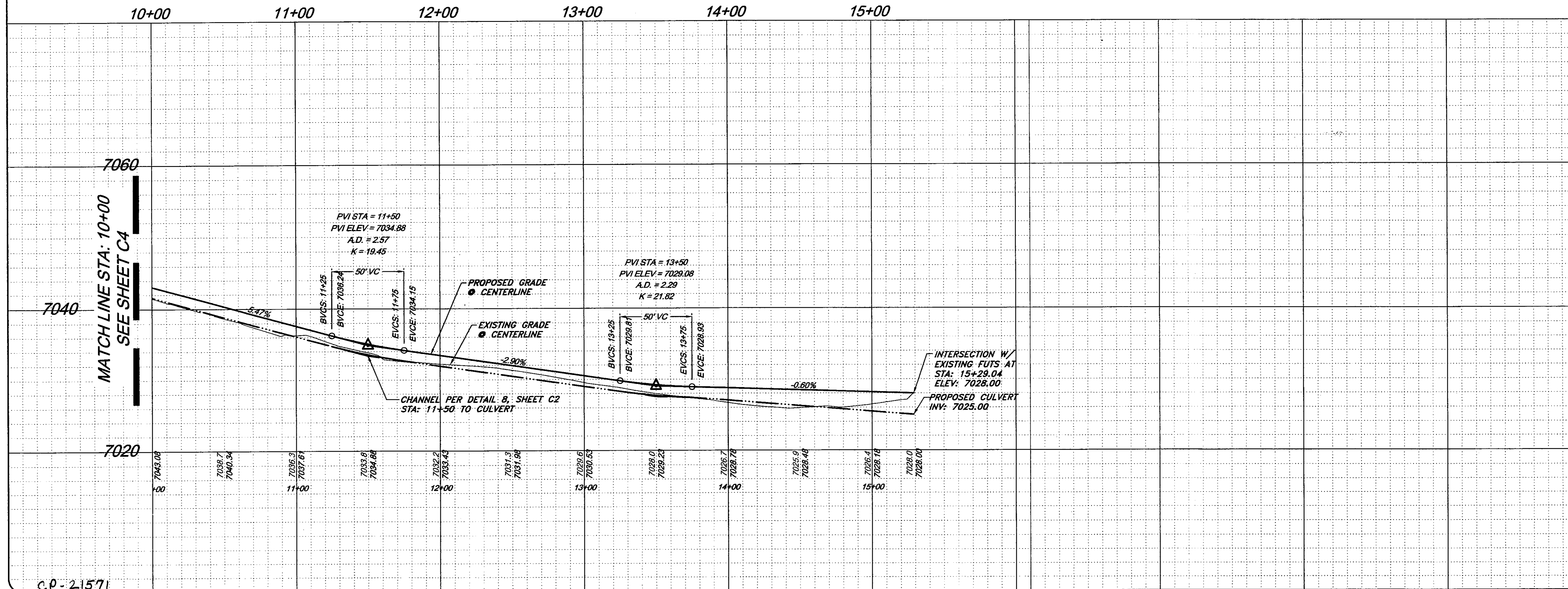
- (NOTE 201) 590 SY  
NEW 10' WIDE AGGREGATE FUTS TRAIL PER COF STD.  
DET. 14-01-010.2
- (NOTE 209) 120 LF  
NEW 24" CULVERT
- (NOTE 210) 1 LS  
GRADE CHANNEL PER DET. 8, SHEET C2
- (NOTE 211) 1 LS  
GRADE CHANNEL PER DET. 7, SHEET C2
- (NOTE 212) 2600 SF  
12" THICK D50 RIP-RAP WITH FILTER FABRIC
- (NOTE 213) 7 EA  
CHECK DAM PER DET. 4, SHEET C2
- (NOTE 214) 1 LS  
GRADE BERM 5' WIDE BERM
- (NOTE 215) 1 LS  
3" HIGH ORANGE CONSTRUCTION FENCE
- (NOTE 216) 1 LS  
GRADE CHANNEL PER DET. 9, SHEET C2.
- (NOTE 219) 1 LS  
NEW SEEDING AND LANDSCAPE RESTORATION

CULVERT TABLE

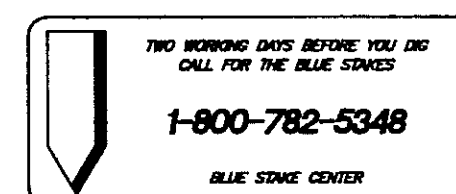
CULVERT	CENTERLINE STATION	INLET(N/E)	OUTLET(N/E)
C3	NA	1530019.85 785220.18	1529997.62 785249.64
C4	NA	1530038.55 785256.07	1530000.22 785260.54

SWITZER MESA PROFILE  
STA: 10+00 TO STA: 15+29.04

HORIZONTAL SCALE: 1"=40'  
VERTICAL SCALE: 1"=4'

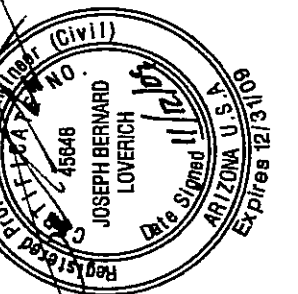


- NOTE:  
1. 3' HIGH ORANGE CONSTRUCTION FENCE SHALL BE  
INSTALL AROUND ALL TREES WITHIN 30' OF  
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THROUGHOUT CONSTRUCTION.



The  
**WLB**  
Group INC.

CEDAR & SWITZER MESA  
FUTS IMPROVEMENT PLANS  
SWITZER MESA PLAN & PROFILE  
STA: 10+00 TO 15+29.04



DESIGNED BY: J.S.B.  
DRAWN BY: J.S.B.  
CHECK BY: J.S.B.  
DATE: NOVEMBER 2009  
BY: J.S.B.  
DATE:

PROJECT NO.  
309025A001  
SHEET OF  
**C5 C5**